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(FILE 'HOME' ENTERED AT 19:34:48 ON 29 APR 2003)

FILE 'MEDLINE, CAPLUS, BIOSIS, SCISEARCH' ENTERED AT 19:35:00 ON 29 APR 2003

L1 290545 S TREHALOSE OR OLIGOSACCHARIDE OR POLYSACCHARIDE
L2 2077 S LOAD?(6A)PLATELET
L3 21 S L1 AND L2
L4 9 DUP REM L3 (12 DUPLICATES REMOVED)
L5 37298 S LOAD?(7A)(PLATELET OR CELL)
L6 170 S L1 AND L5
L7 35190 S LOAD?(6A)(PLATELET OR CELL)
L8 81 S L1(S)L7
L9 50 DUP REM L8 (31 DUPLICATES REMOVED)

=> d au ti so ab 1-9 l4

L4 ANSWER 1 OF 9 MEDLINE DUPLICATE 1
AU Crowe John H; Tablin Fern; Wolkers Willem F; Gousset Karine; Tsvetkova Nelly M; Ricker Josette
TI Stabilization of membranes in human platelets freeze-dried with **trehalose**.
SO CHEMISTRY AND PHYSICS OF LIPIDS, (2003 Jan) 122 (1-2) 41-52.
Journal code: 0067206. ISSN: 0009-3084.
AB Human blood platelets are normally stored in blood banks for 3-5 days, after which they are discarded. We have launched an effort at developing means for preserving the platelets for long term storage. In previous studies we have shown that **trehalose** can be used to preserve biological membranes and proteins during drying and have provided evidence concerning the mechanism. A myth has grown up about special properties of **trehalose**, which we discuss here and clarify some of what is fact and what is misconception. We have found a simple way of introducing this sugar into the cytoplasm of platelets and have successfully freeze-dried the **trehalose-loaded platelets**, with very promising results. We present evidence that membrane microdomains are maintained intact in the platelets freeze-dried with **trehalose**. Finally, we propose a possible mechanism by which the microdomains are preserved.

L4 ANSWER 2 OF 9 MEDLINE DUPLICATE 2
AU Wolkers Willem F; Looper Sheri A; McKiernan Ariane E; Tsvetkova Nelly M; Tablin Fern; Crowe John H
TI Membrane and protein properties of freeze-dried mouse platelets.
SO MOLECULAR MEMBRANE BIOLOGY, (2002 Jul-Sep) 19 (3) 201-10.
Journal code: 9430797. ISSN: 0968-7688.
AB Membrane properties and the overall protein secondary structure of freeze-dried **trehalose-loaded** mouse **platelets** were studied using steady state fluorescence anisotropy and Fourier transform infrared spectroscopy (FTIR). FTIR results showed that fresh control mouse platelets have a main phase transition at approximately 14 degrees C, whereas, freeze-dried platelets exhibited a main phase transition approximately 12 degrees C. However, the cooperativity of the transition of the rehydrated platelets was greatly enhanced compared to that of control platelets. Anisotropy experiments performed with 1,6 diphenyl-1,3,5 hexatriene (DPH) complemented FTIR results and showed that the lipid order in the core of the membrane was affected by freeze-drying procedures. Similar experiments with trimethyl ammonium 1,6 diphenyl-1,3,5 hexatriene (TMA-DPH), a membrane surface probe, indicated that membrane properties at the membrane/water interface were less affected by freeze-drying procedures than the core of the membrane. Lyophilization did not result in massive protein denaturation, but the overall protein secondary structure was altered, based on in situ assessment of the amide-I and amide-II band profiles.

Lyophilization-induced changes to endogenous platelet proteins were further investigated by studying the protein's heat stability. In fresh control platelets, proteins denatured at 42 degrees C, whereas proteins in the rehydrated platelets denatured at 48 degrees C.

L4 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2003 ACS
IN Wolkers, Willem F.; Crowe, John H.; Tablin, Fern; Oliver, Ann E.; Walker, Naomi J.
TI Stabilization of therapeutic platelets
SO PCT Int. Appl., 36 pp.
CODEN: PIXXD2
AB A dehydrated compn. is provided that includes freeze-dried platelets. The **platelets** are **loaded** with **trehalose** which preserves biol. properties during freeze-drying and rehydration. The **trehalose** loading is conducted at temps. from 25 to 40.degree., most preferably at 37.degree., with the loading soln. having **trehalose** in an amt. from about 10 mM to about 50 mM. These freeze-dried platelets are substantially shelf-stable and are rehydratable so as to have a normal response to an agonist, e.g., thrombin, with virtually all of the platelets participating in clot formation within about 3 min at 37.degree.. Platelet suspensions were prepd. and ristocetin was added to the platelet. The clot formation was 95-100% for the agonist tested.

L4 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2003 ACS
IN Stienstra, Stoffer
TI Platelet stabilization by treatment with carbohydrates
SO PCT Int. Appl., 10 pp.
CODEN: PIXXD2
AB Disclosed ia a method for the prodn. of stabilized platelets, comprises the steps of: (i) pre-activating platelets, to induce the formation of microvesicles; (ii) contacting the pre-activated platelets with a carbohydrate, esp. **trehalose**, whereby the carbohydrate is incorporated into the **platelets**; and (iii) drying the thus-**loaded platelets**.

L4 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2003 ACS
IN Roser, Bruce J.; De Vos, Diana
TI Compositions for for stabilizing platelets for dry storage
SO U.S. Pat. Appl. Publ., 15 pp., Cont. of U.S. Ser. No. 366,810, abandoned.
CODEN: USXXCO
AB The invention provides methods for drying platelets to obtain compns. which are storage stable over a wide range of temps. and for an extended period of time. The invention also provides methods for permeabilizing **platelets** which allows them to be **loaded** with various compds. Platelets were acid permeabilized. After addn. of stop buffer, the mixt. was centrifuged at room temp. at 1800 rpm for 10 min to pellet the platelets. Drying buffer was prepd. by bringing the pH of HEPES-buffered saline to 7.0 using 2M and 0.2M NaOH. To 10 mL of this buffer 50 .mu.L hirudin (10 U/mL); 6.25 .mu.L apyrase (20 U/mL); 1 mg magnesium sulfate; 0.1 g **trehalose**; and 0.1 g. BSA were added. Resuspended platelets (300 .mu.L) was carefully pipetted into 3 mL siliconized glass pharmaceutical vials and dried.

L4 ANSWER 6 OF 9 MEDLINE DUPLICATE 3
AU Wolkers W F; Walker N J; Tablin F; Crowe J H
TI Human **platelets loaded** with **trehalose** survive freeze-drying.
SO CRYOBIOLOGY, (2001 Mar) 42 (2) 79-87.
Journal code: 0006252. ISSN: 0011-2240.
AB Human blood platelets are stored in blood banks for 5 days, after which they are discarded, by federal regulation. This short lifetime has led to a chronic shortage of platelets, a problem that is particularly acute in immunosuppressed patients, such as those with AIDS. We report here that

platelets can be preserved by freeze-drying them with **trehalose**, a sugar found at high concentrations in organisms that naturally survive drying. We suggest that these findings will obviate the storage problem with platelets. **Trehalose** is rapidly taken up by human **platelets** at 37 degrees C, with **loading** efficiencies of 50% or greater. Fluid-phase endocytosis plays an important role in this efficient uptake of **trehalose**, but other mechanisms may also be involved. **Trehalose-loaded platelets** were successfully freeze-dried, with excellent recovery of intact platelets. Rehydration from the vapor phase led to a survival rate of 85%. The response of these platelets to the agonists thrombin (1 U/ml), collagen (2 microg/ml), ADP (20 micromM), and ristocetin (1.6 mg/ml) was almost identical to that of fresh, control platelets. Analysis by Fourier transform infrared spectroscopy demonstrated that the membrane and protein components of **trehalose-loaded platelets** after freeze-drying, prehydration, and rehydration were remarkably similar to those of fresh platelets.

L4 ANSWER 7 OF 9 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AU Tablin, Fern (1); Wolkers, Willem F.; Walker, Naomi J. (1); Crowe, John H.
TI **Trehalose loaded**, freeze-dried human **platelets** are functional and retain normal protein structure and membrane phospholipid phase transitions.
SO Blood, (November 16, 2000) Vol. 96, No. 11 Part 1, pp. 62a. print. Meeting Info.: 42nd Annual Meeting of the American Society of Hematology San Francisco, California, USA December 01-05, 2000 American Society of Hematology . ISSN: 0006-4971.
AB Human platelets can be preserved by freeze-drying them with **trehalose**, a sugar found at high concentrations in organisms that naturally survive drying. **Trehalose** is rapidly taken up by human **platelets** at 37oC, with **loading** efficiencies of 50% or greater. Fluid phase endocytosis plays an important role in this remarkably efficient uptake of **trehalose**. **Trehalose-loaded platelets** were successfully freeze-dried with excellent recovery of intact platelets. Rehydration from the vapor phase led to a surival rate of 85% Aggregometry of rehydrated freeze-dried platelets demonstrated that they were responsive to thrombin (1U/ml) collagen (2mug/ml) ADP (20muM) and ristocetin (1.6mg/ml), in an almost identical manner to fresh control platelets. Analysis by Fourier transform infrared (FTIR) spectroscopy of the amide II region (1550 cm-1), demonstrated that the protein components of **trehalose-loaded platelets** after freeze-drying, prehydration and rehydration were remarkably similar to fresh platelets containing primarily beta sheet and turn structures. Treatment of fresh platelets with thrombin showed platelet denaturation as demonstrated by the presence of significant numbers of alpha helixes. Analysis of membrane phospholipid phase transitions by FTIR demonstrated that **trehalose-loaded** freeze-dried rehydrated **platelets** had a phase transition virtually identical to that of control fresh platelets. Thrombin activated platelets, by comparison, showed several transitions, suggestive of phase separation. **Trehalose-loaded** freeze-dried **platelets** are stable for up to 2 weeks at -20oC and remain stable once rehydrated for up to six hours. These studies demonstrate that we can successfully **load**, freeze-dry and rehydrate non-fixed **platelets**, and have them maintain normal structure and function in the rehydrated state.

L4 ANSWER 8 OF 9 MEDLINE DUPLICATE 4
AU Reid T J; Esteban G; Clear M; Gorogias M
TI Platelet membrane integrity during storage and activation.
SO TRANSFUSION, (1999 Jun) 39 (6) 616-24.
Journal code: 0417360. ISSN: 0041-1132.
AB BACKGROUND: The platelet cell membrane appears to undergo a lipid-phase

transition on cooling from 23 degrees C to 4 degrees C. Consequences of this phase transition are leakage of cellular material and irreversible cellular damage. Whether agents, of known benefit in protecting membranes and proteins from cooling and drying injury, could also protect platelets was investigated. Leakage of cytosolic components was assessed by measuring the release of fluorescein into the surrounding medium. STUDY DESIGN AND METHODS: Fresh platelets were suspended in 5 percent dimethyl sulfoxide (DMSO) or in 5 mM of one the following agents: glucose, **trehalose**, sucrose, glycerol, ethylene glycol, 1,2-propanediol, or L-proline. **Platelets** were **loaded** with 10 nMfluorescein diacetate (FD), chilled at 4 degrees C for 24 hours or frozen at -1 degree C per minute to -70 degrees C, warmed rapidly at 37 degrees C, and centrifuged, and the supernatant was measured for the presence of fluorescein. The effect of FD on platelets was assessed by agglutination with ristocetin, aggregation with thrombin and ADP, platelet-induced clot retraction, and expression of p-selectin. Platelet function and activation before and after freezing or cooling were measured by the same methods. RESULTS: By flow cytometry, 98 percent of the platelets incorporated FD. The trapped fluorescein resulted in neither platelet activation ($p = 0.9$) nor reduction of platelet function ($p = 0.12-0.94$) from that in control platelets. Freezing of platelets in DMSO caused far less release of fluorescein than did freezing with other agents ($p<0.001$) or chilling of platelets at 4 degrees C for 24 hours ($p<0.0001$). Supernatant levels of fluorescein correlated inversely with platelet function. Fluorescein was also shown to be released during aggregation with thrombin or ADP but not during agglutination with ristocetin. CONCLUSIONS: Release of fluorescein into the surrounding medium indicated a loss of platelet membrane integrity and function. Cellular loading with FD is a simple method of studying membrane integrity of platelets and other cells.

L4 ANSWER 9 OF 9 MEDLINE DUPLICATE 5

AU Hildreth J E; Derr D; Azorsa D O

TI Characterization of a novel self-associating Mr 40,000 platelet glycoprotein.

SO BLOOD, (1991 Jan 1) 77 (1) 121-32.
Journal code: 7603509. ISSN: 0006-4971.

AB A novel platelet glycoprotein has been purified and characterized. This glycoprotein, designated Pltgp40, is an acidic sialylated 40,000-dalton protein that bears both O-linked and N-linked **oligosaccharides**. Treatment of Pltgp40 with neuraminidase resulted in a 5,000-dalton reduction in its Mr and a 1.5 Unit alkaline shift in the isoelectric point, indicating the presence of a large number of sialic acid residues. A similar size reduction and change in pl were observed after treatment of Pltgp40 with O-glycanase showing that sialic acids are present on O-linked **oligosaccharides**. Digestion of Pltgp40 with N-glycanase reduced the Mr to approximately 20,000 daltons but did not affect the isoelectric point, suggesting that Pltgp40 contains six to seven nonsialylated N-linked carbohydrate chains. High Mr proteins were observed in affinity purified Pltgp40 and were identified as detergent-stable protein oligomers consisting of multiple 40,000-dalton monomers. Immunodepletion and direct binding studies indicated that Pltgp40 was not equivalent to Ig Fc receptor type II, another 40,000-dalton glycoprotein expressed on platelets. However, Pltgp40 copurified with Fc receptor type II when **platelet** extracts were **loaded** onto human IgG affinity columns, raising the possibility that Pltgp40 may associate with Fc receptors or Fc receptor-lg complexes. Amino acid sequence analysis of the N-terminus of Pltgp40 was performed and confirmed that Pltgp40 is a novel platelet glycoprotein. Epitopes on Pltgp40 appear to be widely expressed because monoclonal antibodies against Pltgp40 also reacted with a variety of myeloid, lymphoid, and epithelial cells. Pltgp40 was detected on activated but not resting platelets, indicating that Pltgp40 is a platelet activation marker.

=> d bib 3-5 l4

L4 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2003 ACS
AN 2001:597749 CAPLUS
DN 135:170781
TI Stabilization of therapeutic platelets
IN Wolkers, Willem F.; Crowe, John H.; Tablin, Fern; Oliver, Ann E.; Walker, Naomi J.
PA The Regents of the University of California, USA
SO PCT Int. Appl., 36 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001058266	A1	20010816	WO 2001-US4224	20010208
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	EP 1255439	A1	20021113	EP 2001-907169	20010208
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRAI	US 2000-501773	A	20000210		
	WO 2001-US4224	W	20010208		

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2003 ACS
AN 2001:319654 CAPLUS
DN 134:331585
TI Platelet stabilization by treatment with carbohydrates
IN Stienstra, Stoffer
PA Quadrant Holdings Cambridge Limited, UK
SO PCT Int. Appl., 10 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001030141	A1	20010503	WO 2000-GB4078	20001023
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	EP 1221835	A1	20020717	EP 2000-972970	20001023
	EP 1221835	B1	20030409		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
	JP 2003512392	T2	20030402	JP 2001-532581	20001023
PRAI	US 1999-161194P	P	19991022		

GB 1999-26838 A 19991112
GB 2000-12372 A 20000522
WO 2000-GB4078 W 20001023
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2003 ACS
AN 2001:868949 CAPLUS
DN 136:11285
TI Compositions for for stabilizing platelets for dry storage
IN Roser, Bruce J.; De Vos, Diana
PA UK
SO U.S. Pat. Appl. Publ., 15 pp., Cont. of U.S. Ser. No. 366,810, abandoned.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 2001046487	A1	20011129	US 2001-894579	20010628
PRAI US 1994-366810	B1	19941230		

=> d 25-50 au ti so l9

L9 ANSWER 25 OF 50 CAPLUS COPYRIGHT 2003 ACS
IN Langlois, Bruno
TI Drilling fluid containing cellulose nanofibrils and its use for petroleum production
SO PCT Int. Appl., 27 pp.
CODEN: PIXXD2

L9 ANSWER 26 OF 50 CAPLUS COPYRIGHT 2003 ACS
IN Hui, Sek Wen; Stoicheva, Natailia; Zhao, Ya-li
TI Method and compositions for high efficiency loading, transfection and fusion of cells by electric pulses
SO U.S., 15 pp.
CODEN: USXXAM

L9 ANSWER 27 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 14
AU Vigano, Alessandra; Bricalli, Dorella; Trabattoni, Daria; Salvaggio, Antonino; Ruzzante, Stefania; Barbi, Maria; Di Sanzo, Giuseppe; Principi, Nicola; Clerici, Mario (1)
TI Immunization with both T cell-dependent and T cell-independent vaccines augments HIV viral load secondarily to stimulation of tumor necrosis factor alpha.
SO AIDS Research and Human Retroviruses, (June 10, 1998) Vol. 14, No. 9, pp. 727-734.
ISSN: 0889-2229.

L9 ANSWER 28 OF 50 CAPLUS COPYRIGHT 2003 ACS
IN Bronshtein, Victor
TI Loading and unloading of permeating protectants for cell, tissue, and organ cryopreservation by vitrification
SO PCT Int. Appl., 33 pp.
CODEN: PIXXD2

L9 ANSWER 29 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 15
AU Gouvea, Cibele M. C.; Vidal, Benedito C.; Martins, Ione S. (1)
TI Measuring cytoplasmic calcium level in Citrus protoplasts using the fluorescent probe indo-1.
SO Journal of Plant Physiology, (1997) Vol. 151, No. 3, pp. 329-333.

ISSN: 0176-1617.

L9 ANSWER 30 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 16
AU Miyamoto, Kensuke; Schopfer, Peter (1)
TI Sugar release from maize coleoptiles during auxin-, fusicoccin-, and acid-mediated elongation growth.
SO Journal of Plant Physiology, (1997) Vol. 150, No. 3, pp. 309-316.
ISSN: 0176-1617.

L9 ANSWER 31 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AU Gordon, Maxwell (1); Deeks, Steven; De Marzo, Charles; Goodgame, Jeff; Guralnik, Mario; Lang, William; Mimura, Tohru; Pearce, Daniel; Kaneko, Yutaro
TI Curdlan sulfate (CRDS) in a 21-day intravenous tolerance study in human immunodeficiency virus (HIV) and cytomegalovirus (CMV) infected patients: Indication of anti-CMV activity with low toxicity.
SO Journal of Medicine (Westbury), (1997) Vol. 28, No. 1-2, pp. 108-128.
ISSN: 0025-7850.

L9 ANSWER 32 OF 50 CAPLUS COPYRIGHT 2003 ACS
AU Haritatos, Edith; Keller, Felix; Turgeon, Robert
TI Raffinose oligosaccharide concentrations measured in individual cell and tissue types in Cucumis melo L. leaves: implications for phloem loading
SO Planta (1996), 198(4), 614-22
CODEN: PLANAB; ISSN: 0032-0935

L9 ANSWER 33 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 17
AU Flora, Linda L.; Madore, Monica A. (1)
TI Significance of minor-vein anatomy to carbohydrate transport.
SO Planta (Heidelberg), (1996) Vol. 198, No. 2, pp. 171-178.
ISSN: 0032-0935.

L9 ANSWER 34 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 18
AU Mathy-Hartert, M. (1); Deby-Dupont, G.; Melin, P.; Lamy, M.; Deby, C.
TI Bactericidal activity against Pseudomonas aeruginosa is acquired by cultured human monocyte-derived macrophages after uptake of myeloperoxidase.
SO Experientia (Basel), (1996) Vol. 52, No. 2, pp. 167-174.
ISSN: 0014-4754.

L9 ANSWER 35 OF 50 CAPLUS COPYRIGHT 2003 ACS
AU Zalipsky, Samuel; Brandeis, Ester; Mullah, Nasreen; Harding, Jennifer
TI Synthesis and applications of end-group functionalized poly(ethylene glycol)-phospholipid conjugates.
SO Book of Abstracts, 212th ACS National Meeting, Orlando, FL, August 25-29 (1996), POLY-038 Publisher: American Chemical Society, Washington, D. C.
CODEN: 63BFAF

L9 ANSWER 36 OF 50 SCISEARCH COPYRIGHT 2003 THOMSON ISI
AU VENIERJULIENNE M C (Reprint); VOULDOUKIS I; MONJOUR L; BENOIT J P
TI IN-VITRO STUDY OF THE ANTILEISHMANIAL ACTIVITY OF BIODEGRADABLE NANOPARTICLES
SO JOURNAL OF DRUG TARGETING, (1995) Vol. 3, No. 1, pp. 23-29.
ISSN: 1061-186X.

L9 ANSWER 37 OF 50 CAPLUS COPYRIGHT 2003 ACS
IN Weissleder, Ralph; Bogdanov, Alexei
TI Crosslinked protein or polysaccharide hydrogels, their preparation, and their use in imaging and therapy
SO PCT Int. Appl., 43 pp.
CODEN: PIXXD2

L9 ANSWER 38 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 19
AU WIBAWAN I W T; LAEMMLER C; PASARIBU F H
TI ROLE OF HYDROPHOBIC SURFACE PROTEINS IN MEDIATING ADHERENCE OF GROUP B STREPTOCOCCI TO EPITHELIAL CELLS.
SO J GEN MICROBIOL, (1992) 138 (6), 1237-1242.
CODEN: JGMIAN. ISSN: 0022-1287.

L9 ANSWER 39 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AU MENON M K C; HARTMANN E
TI ROLE OF SUGARS ON THE SECRETION OF CELL WALL POLYSACCHARIDES DURING DIFFERENTIATION OF APOGAMOUS SPOROPHYTES IN THE MOSS PHYSCOMITRIUM.
SO BEITR BIOL PFLANZ, (1991 (1992)) 66 (2), 283-295.
CODEN: BEPFAT. ISSN: 0005-8041.

L9 ANSWER 40 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 20
AU PIKE W J; CLARKE J; LACEY C J N; HUNTER P A; EVANS E G V
TI CANDIDA CELL WALL MANNAN IN THE VAGINA AND ITS ASSOCIATION WITH THE SIGNS AND SYMPTOMS OF VAGINAL CANDIDOSIS.
SO J MED VET MYCOL, (1991) 29 (5), 305-312.
CODEN: JMVMEO. ISSN: 0268-1218.

L9 ANSWER 41 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AU GRIFFIOEN A W; RIJKERS G T; CAMBIER J C
TI FLOW CYTOMETRIC ANALYSIS OF INTRACELLULAR CALCIUM THE POLYCLONAL AND ANTIGEN-SPECIFIC RESPONSE IN HUMAN B LYMPHOCYTES.
SO METHODS (ORLANDO), (1991) 2 (3), 219-226.
CODEN: MTHDE9. ISSN: 1046-2023.

L9 ANSWER 42 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AU HILDRETH J E K; DERR D; AZORSA D O
TI CHARACTERIZATION OF A NOVEL SELF-ASSOCIATING MR 40000 PLATELET GLYCOPROTEIN.
SO BLOOD, (1991) 77 (1), 121-132.
CODEN: BLOOAW. ISSN: 0006-4971.

L9 ANSWER 43 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AU GAMALEI YU V
TI THE STRUCTURAL AND FUNCTIONAL EVOLUTION OF MINOR VEINS OF THE LEAF.
SO BOT ZH (LENINGR), (1988) 73 (11), 1513-1522.
CODEN: BOTZA9. ISSN: 0006-8136.

L9 ANSWER 44 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AU GHINEA N; LEABU M; HASU M; MURESAN V; COLCEAG J; SIMIONESCU N
TI PRELESIONAL EVENTS IN ATHEROGENESIS CHANGES INDUCED BY HYPERCHOLESTEROLEMIA IN THE CELL SURFACE CHEMISTRY OF ARTERIAL ENDOTHELIUM AND BLOOD MONOCYTES IN RABBIT.
SO J SUBMICROSC CYTOL, (1987) 19 (2), 209-228.
CODEN: JSMCBM. ISSN: 0022-4782.

L9 ANSWER 45 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AU TELLAM R L; PARISH C R
TI THE EFFECT OF SULFATED POLYSACCHARIDES ON THE FREE INTRACELLULAR CALCIUM ION CONCENTRATION OF LYMPHOCYTES.
SO BIOCHIM BIOPHYS ACTA, (1987) 930 (1), 55-64.
CODEN: BBACAQ. ISSN: 0006-3002.

L9 ANSWER 46 OF 50 CAPLUS COPYRIGHT 2003 ACS
IN Schwengers, Dieter; Keller, Ingrid
TI Polysaccharide material and its use as a cell culture microcarrier
SO Ger. Offen., 19 pp.
CODEN: GWXXBX

L9 ANSWER 47 OF 50 CAPLUS COPYRIGHT 2003 ACS
AU Gamalei, Yu. V.
TI Phloem loading in woody and herbaceous plants
SO Fiziologiya Rastenii (Moscow) (1985), 32(5), 866-75, 2 plates
CODEN: FZRSAV; ISSN: 0015-3303

L9 ANSWER 48 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AU SERPERSU E H; KINOSITA K JR; TSONG T Y
TI REVERSIBLE AND IRREVERSIBLE MODIFICATION OF ERYTHROCYTE MEMBRANE PERMEABILITY BY ELECTRIC FIELD.
SO BIOCHIM BIOPHYS ACTA, (1985) 812 (3), 779-785.
CODEN: BBACAQ. ISSN: 0006-3002.

L9 ANSWER 49 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AU SUBBOTINA YU L; LEVENSON V I; LYUBINSKAYA M M
TI COMPARATIVE IMMUNOCHEMICAL AND SEROLOGIC INVESTIGATION OF ANTIGENIC COMPOSITION OF RIBOSOMES ISOLATED FROM SHIGELLA-FLEXNERI AND SHIGELLA-SONNEI.
SO IMMUNOLOGIYA, (1983) 0 (5), 58-62.
CODEN: IMMLDW.

L9 ANSWER 50 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AU WETHERELL J R JR; BLEIWEIS A S
TI ANTIGENS OF STREPTOCOCCUS-MUTANS ISOLATION OF A SEROTYPE SPECIFIC AND A CROSS REACTIVE ANTIGEN FROM WALLS OF STRAIN V-100 SEROTYPE E.
SO INFECT IMMUN, (1978) 19 (1), 160-169.
CODEN: INFIBR. ISSN: 0019-9567.

=> d 26 28 48 bib ab l9

L9 ANSWER 26 OF 50 CAPLUS COPYRIGHT 2003 ACS
AN 1998:534834 CAPLUS
DN 129:119877
TI Method and compositions for high efficiency loading, transfection and fusion of cells by electric pulses
IN Hui, Sek Wen; Stoicheva, Natailia; Zhao, Ya-li
PA Health Research Inc., USA
SO U.S., 15 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5789213	A	19980804	US 1995-439187	19950511
PRAI	US 1995-439187		19950511		

AB Methods and compns. are provided for use in electroloading procedures to increase the transfection and fusion efficiency compared to the methods now used in the art. The compns. comprise a two-phase polymer system contg. two water sol. polymers which, when mixed, result in target cells and biol. material being encapsulated into one of the polymer phases in a concd. form. The methods of the present invention for electroloading biol. material into target cells comprises mixing the biol. material into one of the phases of the two-phase polymer system; mixing the target cells into either of the phases of the two-phase polymer system; mixing the phases together to form an emulsion; and exposing the emulsion to a pulsing elec. field in an electroloading process.
RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 28 OF 50 CAPLUS COPYRIGHT 2003 ACS
AN 1997:803775 CAPLUS

DN 128:53192
TI Loading and unloading of permeating protectants for cell, tissue, and organ cryopreservation by vitrification
IN Bronshtein, Victor
PA Universal Preservation Technologies, Inc., USA; Bronshtein, Victor
SO PCT Int. Appl., 33 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9745010	A1	19971204	WO 1997-US9207	19970529
	W: AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ, DE, DE, DK, DK, EE, EE, ES, FI, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9732900	A1	19980105	AU 1997-32900	19970529
	EP 921723	A1	19990616	EP 1997-928712	19970529
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 2001517204	T2	20011002	JP 1997-542954	19970529
PRAI	US 1996-18638P	P	19960529		
	WO 1997-US9207	W	19970529		

AB The present invention is directed to a method for cryopreserving a biol. sample, including gradually or stepwise loading the sample with permeating protectant by contacting the sample with solns. including the protectant and a non-permeating co-solute that limits the amt. of protectant that penetrates into cells of the biol. specimen. The method further includes the gradual or step of unloading (rehydration) of the sample by contacting the sample with one ore more rehydration solns. having progressively lower concns. of both the protectant and co-solute, such that the protectant is removed from the cells of the sample. Concn. of the co-solute during loading and unloading should be at max. value that still does not damage the sample at room and subzero temps. An example is given for gradual loading and unloading of rat heart with DMSO.

L9 ANSWER 48 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AN 1985:330630 BIOSIS
DN BA80:622
TI REVERSIBLE AND IRREVERSIBLE MODIFICATION OF ERYTHROCYTE MEMBRANE PERMEABILITY BY ELECTRIC FIELD.
AU SERPERSU E H; KINOSITA K JR; TSONG T Y
CS DEP. BIOLOGICAL CHEMISTRY, JOHNS HOPKINS UNIV., SCH. MED., BALTIMORE, MD 21205, USA.
SO BIOCHIM BIOPHYS ACTA, (1985) 812 (3), 779-785.
CODEN: BBACAQ. ISSN: 0006-3002.
FS BA; OLD
LA English
AB Electric fields of a few kV/cm and of duration in .mu.s are known to implant pores of limited size in cell membranes. A study of kinetics of pore formation and reversibility of pores is reported. Loading of biologically active molecules was also attempted. For human erythrocytes in an isotonic saline, pores allowed passive Rb+ entry formed within 0.5 .mu.s when a 4 kV/cm electric pulse was used. Pores that admitted **oligosaccharides** were introduced with an electric pulse of a longer duration in an isosmotic mixture of NaCl and sucrose. These pores were irreversible under most circumstances, but they could be resealed in an osmotically balanced medium. A complete resealing of pores that

admitted Rb+ took .apprx. 40 min at 37.degree. C. Resealing of pores that admitted sucrose took much longer, 20 h, under similar conditions. In other cell types, resealing step may be omitted due to stronger membrane structures. Experimental protocols for **loading** small molecules into **cells** without losing cytoplasmic macromolecules are discussed.

=> d 15-24 au ti so l9

L9 ANSWER 15 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 8
AU Janes, Kevin A.; Fresneau, Marie P.; Marazuela, Ana; Fabra, Angels; Alonso, Maria Jose (1)
TI Chitosan nanoparticles as delivery systems for doxorubicin.
SO Journal of Controlled Release, (15 June, 2001) Vol. 73, No. 2-3, pp. 255-267. print.
ISSN: 0168-3659.

L9 ANSWER 16 OF 50 MEDLINE DUPLICATE 9
AU Wolkers W F; Walker N J; Tablin F; Crowe J H
TI Human **platelets loaded** with **trehalose** survive freeze-drying.
SO CRYOBIOLOGY, (2001 Mar) 42 (2) 79-87.
Journal code: 0006252. ISSN: 0011-2240.

L9 ANSWER 17 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AU Toner, Mehmet (1); Russo, Michael; Bieganski, Robert
TI Controlled reversible poration for preservation of biological materials.
SO Official Gazette of the United States Patent and Trademark Office Patents, (Oct. 3, 2000) Vol. 1239, No. 1, pp. No Pagination. e-file.
ISSN: 0098-1133.

L9 ANSWER 18 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AU Barenholz, Yechezkel (1); Bar, Lilianne K.; Diminsky, Dvorah; Baru, Moshe
TI Method for preparation of vesicles loaded with biological structures, biopolymers and/or oligomers.
SO Official Gazette of the United States Patent and Trademark Office Patents, (May 23, 2000) Vol. 1234, No. 4, pp. No Pagination. e-file.
ISSN: 0098-1133.

L9 ANSWER 19 OF 50 MEDLINE DUPLICATE 10
AU Eroglu A; Russo M J; Bieganski R; Fowler A; Cheley S; Bayley H; Toner M
TI Intracellular trehalose improves the survival of cryopreserved mammalian cells.
SO NATURE BIOTECHNOLOGY, (2000 Feb) 18 (2) 163-7.
Journal code: 9604648. ISSN: 1087-0156.

L9 ANSWER 20 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AU Tablin, Fern (1); Wolkers, Willem F.; Walker, Naomi J. (1); Crowe, John H.
TI **Trehalose loaded**, freeze-dried human **platelets** are functional and retain normal protein structure and membrane phospholipid phase transitions.
SO Blood, (November 16, 2000) Vol. 96, No. 11 Part 1, pp. 62a. print.
Meeting Info.: 42nd Annual Meeting of the American Society of Hematology San Francisco, California, USA December 01-05, 2000 American Society of Hematology
. ISSN: 0006-4971.

L9 ANSWER 21 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 11
AU Reid, T. J. (1); Esteban, G.; Clear, M.; Gorogias, M.
TI Platelet membrane integrity during storage and activation.
SO Transfusion (Bethesda), (June, 1999) Vol. 39, No. 6, pp. 616-624.

ISSN: 0041-1132.

L9 ANSWER 22 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 12
AU Bulpitt, Paul; Aeschlimann, Daniel (1)
TI New strategy for chemical modification of hyaluronic acid: Preparation of functionalized derivatives and their use in the formation of novel biocompatible hydrogels.
SO Journal of Biomedical Materials Research, (Nov., 1999) Vol. 47, No. 2, pp. 152-169.
ISSN: 0021-9304.

L9 ANSWER 23 OF 50 MEDLINE DUPLICATE 13
AU Gilles R; Bourdouxhe-Housiaux C; Colson P; Houssier C
TI Effect of compensatory organic osmolytes on resistance to freeze-drying of L929 cells and of their isolated chromatin.
SO COMPARATIVE BIOCHEMISTRY AND PHYSIOLOGY. PART A, MOLECULAR AND INTEGRATIVE PHYSIOLOGY, (1999 Jan) 122 (1) 145-55.
Journal code: 9806096. ISSN: 1095-6433.

L9 ANSWER 24 OF 50 SCISEARCH COPYRIGHT 2003 THOMSON ISI
AU Rudd P M (Reprint); Wormald M R; Dwek R A
TI Glycosylation and the immune system
SO TRENDS IN GLYCOSCIENCE AND GLYCOTECHNOLOGY, (JAN 1999) Vol. 11, No. 57, pp. 1-21.
Publisher: FCCA-FORUM CARBOHYDRATES COMING AGE, C/O GAKUSHIN CO LTD, DEPT PUBL 2-1-21 TARUMI-CHO, SUITA 564, OSAKA JAPAN.
ISSN: 0915-7352.